

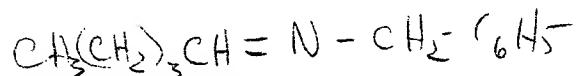
985  
SEARCH REQUEST FORM 4/206

Requestor's Name: Don Wilson Serial Number: 09/097,035  
 Date: 12/15/99 Phone: 308-2398 Art Unit: 1713

## Search Topic:

Please write a detailed statement of search topic. Describe specifically as possible the subject matter to be searched. Define any terms that may have a special meaning. Give examples or relevant citations, authors, keywords, etc., if known. For sequences, please attach a copy of the sequence. You may include a copy of the broadest and/or most relevant claim(s).

Please do a search for



N-butyldiene benzyl amine

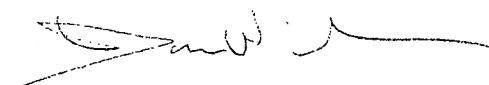
I am particularly interested in reaction of this compound with the end-group of anisically polymerized polymers such as polybutadiene, which has been polymerized with an organo-lithium reagent.

Inventors:

James A. Krum

Xiaoxing Wang

Thanks, in advance



## STAFF USE ONLY

Date completed: 12/21/99  
 Searcher: Kathleen Taylor  
 Terminal time: 14  
 Elapsed time: \_\_\_\_\_  
 CPU time: \_\_\_\_\_  
 Total time: 24  
 Number of Searches: 1  
 Number of Databases: \_\_\_\_\_

## Search Site

STIC

CM-1

Pre-S

## Type of Search

N.A. Sequence

A.A. Sequence

Structure

Bibliographic

## Vendors

IG  
 STN 107

Dialog

APS

Geninfo

SDC

DARC/Questel

Other

=> FILE REG

FILE 'REGISTRY' ENTERED AT 16:20:08 ON 21 DEC 1999  
 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.  
 PLEASE SEE "HELP USAGETERMS" FOR DETAILS.  
 COPYRIGHT (C) 1999 American Chemical Society (ACS)

STRUCTURE FILE UPDATES: 20 DEC 99 HIGHEST RN 251376-08-6  
 DICTIONARY FILE UPDATES: 20 DEC 99 HIGHEST RN 251376-08-6

TSCA INFORMATION NOW CURRENT THROUGH JANUARY 13, 1999

Please note that search-term pricing does apply when  
 conducting SmartSELECT searches.

POTENTIAL STEREO BOND SEARCH PROBLEM WITH STN EXPRESS WITH DISCOVER!  
 5.0 (Windows Only) SEE NEWS MESSAGE FOR DETAILS.

=> D L21

L21 ANSWER 1 OF 1 REGISTRY COPYRIGHT 1999 ACS  
 RN 56249-61-7 REGISTRY  
 CN Benzenemethanamine, N-butyliidene- (9CI) (CA INDEX NAME)  
 OTHER CA INDEX NAMES:  
 CN Benzylamine, N-butyliidene- (7CI)  
 OTHER NAMES:  
 CN **N-Butyliidenebenzylamine** ✗  
 FS 3D CONCORD  
 MF C11 H15 N  
 LC STN Files: BEILSTEIN\*, CA, CAOLD, CAPLUS, CASREACT, CHEMINFORMRX, TOXLIT  
 (\*File contains numerically searchable property data)

n-Pr—CH=—N—CH<sub>2</sub>—Ph

31 REFERENCES IN FILE CA (1967 TO DATE)  
 31 REFERENCES IN FILE CAPLUS (1967 TO DATE)  
 2 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

=> D HIS L22

(FILE 'REGISTRY' ENTERED AT 16:18:57 ON 21 DEC 1999)

L22 FILE 'REGISTRY' ENTERED AT 16:20:08 ON 21 DEC 1999  
 0 S 56249-61-7/CRN not found as a component  
 => FILE HCAPLUS

FILE 'HCAPLUS' ENTERED AT 16:25:51 ON 21 DEC 1999  
 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.  
 PLEASE SEE "HELP USAGETERMS" FOR DETAILS.  
 COPYRIGHT (C) 1999 AMERICAN CHEMICAL SOCIETY (ACS)

Copyright of the articles to which records in this database refer is  
 held by the publishers listed in the PUBLISHER (PB) field (available  
 for records published or updated in Chemical Abstracts after December  
 26, 1996), unless otherwise indicated in the original publications.

FILE COVERS 1967 - 21 Dec 1999 VOL 131 ISS 26  
 KATHLEEN FULLER STIC LIBRARY 308-4290

FILE LAST UPDATED: 20 Dec 1999 (19991220/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

This file supports REGISTRY for direct browsing and searching of all substance data from the REGISTRY file. Enter HELP FIRST for more information.

=> D QUE L26

L21 1 SEA FILE=REGISTRY ABB=ON N-BUTYLIDENE BENZYLAMINE/CN  
 L23 31 SEA FILE=HCAPLUS ABB=ON L21  
 L26 1 SEA FILE=HCAPLUS ABB=ON L23 AND (POLYMER? OR PLASTIC?)/SC, SX, A  
 B, BI

=> D ALL

L26 ANSWER 1 OF 1 HCAPLUS COPYRIGHT 1999 ACS  
 AN 1998:499362 HCAPLUS  
 DN 129:230336

TI Catalytic C:N bond formation by metal-imide-mediated imine metathesis  
 AU Cantrell, Gidget K.; Meyer, Tara Y.  
 CS Department of Chemistry, University of Pittsburgh, Pittsburgh, PA, 15260,  
 USA  
 SO J. Am. Chem. Soc. (1998), 120(32), 8035-8042  
 CODEN: JACSAT; ISSN: 0002-7863  
 PB American Chemical Society  
 DT Journal  
 LA English  
 CC 22-4 (Physical Organic Chemistry)  
 AB Mo bis(imide) complexes of the general formula (DME)Mo(:NR)2Cl2 (I) catalytically metathesize acyclic imine substrates. This C:N bond-forming reaction has significant implications for the synthesis of small mols. by ring-closing metathesis and **polymers** by ring-opening metathesis. A series of closely related :NR-transfer reactions was exampd. in an effort to fully understand the process. [MeC(CF3)2O]2Mo(:CHR')[:NC6H3(CHMe2)2-2,6] underwent alkylidene/imine exchange with a variety of imines in situ to give a mixed bis(imide) product and an olefin. The reactivity decreased if the alkoxide substituents were changed for more electron-donating ones. I [R = C6H3(CHMe2)2-2,6 (II), CMe3 (III)] reacted with imines in an imide/imine metathesis to give mixed bis(imide) complexes and new imines. The reaction rates depended strongly on the steric demands of the imide NR substituent. Replacement of the Cl atoms in I with more electron-donating alkoxide ligands inhibited the reactions. II and III also exchanged imide ligands with each other (imide/imide metathesis). Finally, II and III catalytically metathesized mixts. of 2 imines at 80.degree. in 105 and 22 h, resp. This reaction is mediated by the presence of unique initiation products in catalytic mixts. A catalytic cycle is proposed, and the nature of the mechanism is discussed in terms of the data gathered on all of the metatheses.

ST imide metathesis molybdenum complex catalyst

IT Double bond

(carbon-nitrogen; catalytic C:N bond formation by metal-imide-mediated imine metathesis)

IT Imines

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)  
 (catalytic C:N bond formation by metal-imide-mediated imine metathesis)

IT Metathesis

Metathesis catalysts

Metathesis kinetics

(imine; catalytic C:N bond formation by metal-imide-mediated imine metathesis)  
 IT 212688-41-0  
 RL: RCT (Reactant)  
 (attempted catalytic C:N bond formation by metal-imide-mediated imine metathesis)  
 IT 6852-58-0P, 2-Propanamine, 2-methyl-N-(phenylmethylene)-  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)  
 (attempted catalytic C:N bond formation by metal-imide-mediated imine metathesis)  
 IT 126949-60-8 141198-25-6  
 RL: CAT (Catalyst use); RCT (Reactant); USES (Uses)  
 (catalytic C:N bond formation by metal-imide-mediated imine metathesis)  
 IT 6852-55-7, Propylamine, N-benzylidene- 26029-60-7, Benzenamine,  
 N-(2,2-dimethylpropylidene)- 56249-61-7, Benzylamine,  
 N-butyridene- 56951-64-5, 2-Propanamine, N-hexylidene-2-methyl-  
 108945-98-8 108969-03-5 152507-75-0, 1-Propanamine, N-hexylidene-  
 RL: RCT (Reactant)  
 (catalytic C:N bond formation by metal-imide-mediated imine metathesis)  
 IT 538-51-2P 7707-71-3P, 1-Propanamine, N-butyridene-  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)  
 (catalytic C:N bond formation by metal-imide-mediated imine metathesis)  
 IT 1432-48-0P, 2-Propanamine, N-(2,2-dimethylpropylidene)-2-methyl-  
 3846-66-0P, Benzene, (3,3-dimethyl-1-butenyl)-, E- 117696-79-4P,  
 Benzenamine, 2,6-bis(1-methylethyl)-N-(phenylmethylene)- 195866-44-5P,  
 Benzenamine, N-(2,2-dimethylpropylidene)-2,6-bis(1-methylethyl)-  
 199481-77-1P 199481-82-8P 199481-85-1P 212688-38-5P 212688-39-6P  
 212688-42-1P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (catalytic C:N bond formation by metal-imide-mediated imine metathesis)

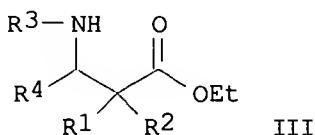
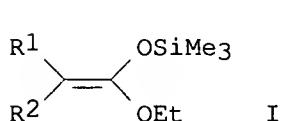
=> S L23 NOT L26

L27 30 L23 NOT L26

=> D L27 BIB ABS 1-30

*Printed the remaining 30 cat ref's  
on this  
compound*

L27 ANSWER 1 OF 30 HCAPLUS COPYRIGHT 1999 ACS  
 AN 1999:446788 HCAPLUS  
 DN 131:129537  
 TI Highly diastereoselective addition reaction of ketene silyl acetals to  
 imines catalyzed by samarium(III) iodide  
 AU Hayakawa, Ryuichirou; Shimizu, Makoto  
 CS Department of Chemistry for Materials, Mie University, Mie, 514-8507,  
 Japan  
 SO Chem. Lett. (1999), (7), 591-592  
 CODEN: CMLTAG; ISSN: 0366-7022  
 PB Chemical Society of Japan  
 DT Journal  
 LA English  
 OS CASREACT 131:129537  
 GI



AB In the presence of a catalytic amt. of samarium(III) iodide, the addn. reaction of ketene silyl acetals I (R1,R2 = H,H; H,Me; Me,Me) to achiral imines R3N:CHR4 (II; R3 = p-MeOC6H4, PhCH2; R4 = Ph, n-Pr, 2-furyl, PhCH:CH) affords the corresponding .beta.-amino esters III with high anti selectivity for R1, R2 = H,Me. The reaction of chiral imines II [R3 = p-MeOC6H4; R4 = 2-methyl-4(S),5(S)-bis(methoxymethyl)dioxolan-2-yl, (S)-Me3CSiMe2OCHPh] under the same conditions gives .beta.-amino esters with high diastereoselectivity.

L27 ANSWER 2 OF 30 HCAPLUS COPYRIGHT 1999 ACS  
 AN 1999:435028 HCAPLUS  
 DN 131:170288  
 TI Synthesis of oxazolidine derivatives by the reaction of imines with epoxides in the presence of lanthanide complexes  
 AU Nishitani, Takayuki; Shiraishi, Hiroyuki; Sakaguchi, Satoshi; Ishii, Yasutaka  
 CS Department of Applied Chemistry, Faculty of Engineering & High Technology Research Center, Kansai University, Suita, 564-8680, Japan  
 SO Kidorui (1999), 34, 310-311  
 CODEN: KIDOEP; ISSN: 0910-2205  
 PB Nippon Kidorui Gakkai  
 DT Journal  
 LA Japanese  
 OS CASREACT 131:170288  
 AB The cycloaddn. reaction of imines with epoxides in the presence of lanthanide complexes was exampd. A mixt. of N-(1-methyl)ethylidenebenzylamine and isobutylene oxide in THF was allowed to react under the influence of SmI2 at room temp., giving N-benzyl-2,2,4,4-tetramethyloxazolidine in good yield. Among the lanthanide compds. employed, SmI2 was found to be the most efficient catalyst.

L27 ANSWER 3 OF 30 HCAPLUS COPYRIGHT 1999 ACS  
 AN 1996:687226 HCAPLUS  
 DN 125:327716  
 TI Organic syntheses over titanium catalysts  
 IN Sato, Fumie  
 PA Nissan Chemical Industries, Ltd., Japan  
 SO PCT Int. Appl., 232 pp.  
 CODEN: PIXXD2  
 DT Patent  
 LA Japanese  
 FAN.CNT 1  

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 9628250	A1	19960919	WO 1996-JP578	19960308
W: AU, CA, CN, CZ, HU, JP, KR, NO, RO, RU, SK, UA, US RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
AU 9648900	A1	19961002	AU 1996-48900	19960308
EP 820809	A1	19980128	EP 1996-905041	19960308
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
PRAI JP 1995-79685		19950310		
WO 1996-JP578		19960308		
OS CASREACT 125:327716; MARPAT 125:327716				
AB Org. syntheses involving reaction between unsatd. carbon compds. and compds. having an electrophilic functional group were catalyzed by TiX1X2X3X4 [X1-X4 = halo, C1-20 alkoxy, aralkoxy, aryloxy or NRxRy (wherein Rx, Ry = C1-20 alkyl or aralkyl), any of X1, X2, X3 and X4 may form a ring together with the others] optionally in the presence of 1.5-2.5 mol equiv R1MgX5 (R1 = C2-10 alkyl having a H atom at the .beta.-position; X5 = halo). A soln. of 2.0 mmol iso-PrMgBr in Et2O was added to a soln. of 1.0 mmol (iso-PrO)4Ti and 1.0 mmol allyl bromide in Et2O at -50.degree. with stirring, followed by 0.7 mmol PhCHO with				

stirring at -45.degree. to -40.degree. and the soln. was worked up to give 94% 1-phenyl-3-buten-1-ol.

L27 ANSWER 4 OF 30 HCAPLUS COPYRIGHT 1999 ACS  
 AN 1996:412011 HCAPLUS  
 DN 125:167616  
 TI A catalytic amount of titanium tetrahalide as promoter for the addition reaction of silyl ketene acetals to imines  
 AU Shimizu, Makoto; Kume, Kouji; Fujisawa, Tamotsu  
 CS Dep. Chem. mater., Mie Univ., Mie, 514, Japan  
 SO Chem. Lett. (1996), (7), 545-546  
 CODEN: CMLTAG; ISSN: 0366-7022  
 DT Journal  
 LA English  
 OS CASREACT 125:167616  
 AB In the presence of a catalytic amt. of  $TiBr_4$  or  $TiI_4$ , the reaction of silyl ketene acetals with imines smoothly proceeds to give the corresponding .beta.-amino esters in high yield with high anti-selectivity.

L27 ANSWER 5 OF 30 HCAPLUS COPYRIGHT 1999 ACS  
 AN 1996:28816 HCAPLUS  
 DN 124:202441  
 TI Novel addition reaction of  $HGeCl_3$  to imine and the stability of the corresponding products and their derivatives  
 AU Mao, Li Juan; Chen, Ru Yu; Zhang, Wei; He, Da Yong  
 CS Research Institute of Elemento-Organic Chemistry, Nankai University, Tianjin, 300071, Peop. Rep. China  
 SO Chin. Chem. Lett. (1995), 6(12), 1025-8  
 CODEN: CCLEE7  
 DT Journal  
 LA English  
 AB Efficiently direct addn. of  $HGeCl_3$  to imine has been investigated, affording excellent yield of the products. The reaction conditions are the key factor for whether the reaction will successfully occur. It is also been found that the germatrane is another kind of stable deriv. besides its sesquioxide. Thus, addn. reaction of  $RCH:NCH_2Ph$  with  $HGeCl_3$  at -15.degree. in weak-polarity mixed solvents gave  $[RCH(GeCl_3)NHCH_2Ph]$  ( $R$  = alkyl, substituted Ph) which were not stable and converted to stable products like sesquioxides and germatranes.

L27 ANSWER 6 OF 30 HCAPLUS COPYRIGHT 1999 ACS  
 AN 1995:900666 HCAPLUS  
 DN 124:116318  
 TI Yb/TMSBr promoted homocoupling reactions of aliphatic ketones, .alpha.,.beta.-unsaturated ketones and aliphatic imines  
 AU Taniguchi, Yuki; Kuno, Tatsuhiko; Nakahashi, Manabu; Takaki, Ken; Fujiwara, Yuzo  
 CS Dept. Applied Chem., Hiroshima Univ., Hiroshima, 739, Japan  
 SO Appl. Organomet. Chem. (1995), 9(5 & 6), 491-503  
 CODEN: AOCHEX; ISSN: 0268-2605  
 DT Journal  
 LA English  
 OS CASREACT 124:116318  
 AB A powerful reducing reagent, ytterbium dibromide ( $YbBr_2$ ), was synthesized by a new method using ytterbium metal and trimethylsilyl bromide (TMSBr) in tetrahydrofuran-hexamethylphosphoramide (THF-HMPA).  $YbBr_2$ , thus formed in situ, causes coupling reactions of aliph. ketones, .alpha.,.beta.-unsatd. ketones and aliph. aldimines to give bis-silylated 1,2-diols, 1,6-diketones and 1,2-diamines, resp., in good yields. In the case of aliph. ketimines, the corresponding reduced and silylated amines are obtained. In this solvent system, the trialkylsilyl moiety of trialkylsilyl bromide is converted to trialkylsilanes quant. These results show that the Yb/TMSBr reagent generates  $YbBr_2$  in situ and the

YbBr<sub>2</sub> thus formed acts as a single-electron reductant for these coupling reactions.

L27 ANSWER 7 OF 30 HCAPLUS COPYRIGHT 1999 ACS  
 AN 1995:760460 HCAPLUS  
 DN 123:338595  
 TI Stereoselective synthesis of allylic amines by the reaction of titanium-alkyne complexes with imines  
 AU Gao, Yuan; Harada, Kousuke; Sato, Fumie  
 CS Dep. Biomol. Eng., Tokyo Inst. Technol., Yokohama, 226, Japan  
 SO Tetrahedron Lett. (1995), 36(33), 5913-16  
 CODEN: TELEAY; ISSN: 0040-4039  
 DT Journal  
 LA English  
 OS CASREACT 123:338595  
 AB Titanium-alkyne complexes, readily prepd. in situ by the reaction of alkynes with Ti(O-i-Pr)<sub>4</sub>/2 i-PrMgBr, reacted with imines, metallo-imines of hydrazones under mild conditions to provide the corresponding addn. products in excellent to good yields, thus providing highly efficient access to allylic amines or their derivs.

L27 ANSWER 8 OF 30 HCAPLUS COPYRIGHT 1999 ACS  
 AN 1995:653288 HCAPLUS  
 DN 123:313477  
 TI Tris(pentafluorophenyl)boron as an efficient, air stable, and water-tolerant Lewis acid catalyst  
 AU Ishihara, Kazuaki; Hanaki, Naoyuki; Funahashi, Miyuki; Miyata, Mayumi; Yamamoto, Hisashi  
 CS Sch. Engineering, Nagoya Univ., Nagoya, 464-01, Japan  
 SO Bull. Chem. Soc. Jpn. (1995), 68(6), 1721-30  
 CODEN: BCSJA8; ISSN: 0009-2673  
 DT Journal  
 LA English  
 OS CASREACT 123:313477  
 AB Tris(pentafluorophenyl)boron is an efficient, air stable, and water tolerant Lewis acid catalyst for the aldol-type and Michael reactions of silyl enol ethers with carbonyl compds. or other electrophiles (tri-Me orthoformate, di-Me acetal, and chloromethyl Me ether), the allylation reaction of allylsilanes with aldehydes, and the Diels-Alder reaction of dienes with .alpha.,.beta.-unsatd. aldehydes. A soln. of formaldehyde in water is applicable as an electrophile. Also, the aldol-type reaction of ketene silyl acetals with arom. or aliph. imines is successfully carried out using the same catalyst.

L27 ANSWER 9 OF 30 HCAPLUS COPYRIGHT 1999 ACS  
 AN 1995:578957 HCAPLUS  
 DN 123:82530  
 TI Preparations of Secondary Amines and .beta.-Amino Esters via Additions of Grignard and Reformatsky Reagents to Imines and by One-Pot Reactions of Primary Amines, Aldehydes, and Grignards  
 AU Katritzky, Alan R.; Hong, Qingmei; Yang, Zhijun  
 CS Center for Heterocyclic Compounds, University of Florida, Gainesville, FL, 32611-7200, USA  
 SO J. Org. Chem. (1995), 60(11), 3405-8  
 CODEN: JOCEAH; ISSN: 0022-3263  
 DT Journal  
 LA English  
 AB Addns. of Grignard and Reformatsky reagents to imines in the presence of 1-(trimethylsilyl)benzotriazole afforded in good yields the corresponding secondary amines and .beta.-amino esters. The procedure is general as imines contg. hydrogens .alpha. to both carbon and nitrogen can be employed. Extensions of this method to include imines contg. other Lewis basic centers, e.g., those derived from furan-, thiophene-, indole-, and p-methoxybenzenecarboxaldehyde, have been successful in avoiding the

potential complications which could result from the use of a Lewis acid as the activating species. The imines need not be isolated, and a one-pot method for the synthesis of secondary amines from aldehydes, primary amines, and Grignard reagents is described.

L27 ANSWER 10 OF 30 HCPLUS COPYRIGHT 1999 ACS  
 AN 1995:286872 HCPLUS  
 DN 122:132514  
 TI Preparation of YbBr<sub>2</sub> and its reaction with aliphatic imines  
 AU Taniguchi, Yuki; Kuno, Tatsuhiko; Kakahashi, Manabu; Takaki, Ken;  
 Fujiwara, Yuzo  
 CS Department of Applied Chemistry, Faculty of Engineering, Hiroshima  
 University, Kagamiyama, Higashi-Hiroshima, 724, Japan  
 SO J. Alloys Compd. (1994), 216(1), L9-L12  
 CODEN: JALCEU; ISSN: 0925-8388  
 DT Journal  
 LA English  
 OS CASREACT 122:132514  
 AB A powerful reducing reagent, ytterbium dibromide (YbBr<sub>2</sub>), was synthesized by a new method. Treatment of ytterbium metal with trialkylsilyl bromide in THF/HMPA affords YbBr<sub>2</sub>. In this solvent system, the trialkylsilyl moiety of trialkylsilyl bromide is converted to trialkylsilanes quant. The YbBr<sub>2</sub> obtained reacts with aliph. aldimines, e.g., Me<sub>2</sub>CHCH:NCH<sub>2</sub>Ph, to give the homocoupling adducts, e.g., 1,2-diamine [PhCH<sub>2</sub>NHCH(CHMe<sub>2</sub>)]<sub>2</sub>, in excellent yields. In the case of aliph. ketimines, the corresponding reduced and silylated amines are obtained. These results show that the Yb/TMS-Br reagent generates YbBr<sub>2</sub> in situ and thus the YbBr<sub>2</sub> formed acts as a single electron reductant for these coupling reactions.

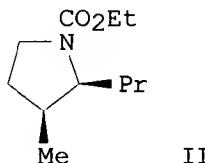
L27 ANSWER 11 OF 30 HCPLUS COPYRIGHT 1999 ACS  
 AN 1995:270826 HCPLUS  
 DN 123:197936  
 TI Tris(pentafluorophenyl)borane as an efficient catalyst in the aldol-type reaction of ketene silyl acetals with imines  
 AU Ishihara, Kazuaki; Funahashi, Miyuki; Hanaki, Naoyuki; Miyata, Mayumi;  
 Yamamoto, Hisashi  
 CS School Engineering, Nagoya Univ., Nagoya, 464-01, Japan  
 SO Synlett (1994), (11), 963-4  
 CODEN: SYNLES; ISSN: 0936-5214  
 DT Journal  
 LA English  
 OS CASREACT 123:197936  
 AB The aldol-type reaction of ketene silyl acetals with arom. or aliph. imines is successfully carried out using tris(pentafluorophenyl)borane as a catalyst (0.2.apprx.10 mol%). The aldol condensation of [[1-(1,1-dimethylethoxy)ethenyl]oxy]trimethylsilane (ketene silyl acetal) and N-(phenylmethylene)benzenamine (imine) gave 3-[(phenylmethyl)amino]benzenepropanoic acid 1,1-dimethylethyl ester.

L27 ANSWER 12 OF 30 HCPLUS COPYRIGHT 1999 ACS  
 AN 1995:265821 HCPLUS  
 DN 122:80808  
 TI Rare earth/silyl halide-promoted homocoupling reaction of aliphatic ketones and imines.  
 AU Kuno, T.; Nakahashi, M.; Taniguchi, Y.; Takaki, K.; Fujiwara, Y.  
 CS Faculty Engineering, Hiroshima University, Higashi-Hiroshima, Japan  
 SO Kidorui (1993), 22, 50-1  
 CODEN: KIDOEP; ISSN: 0910-2205  
 DT Journal  
 LA Japanese  
 AB A new reducing reagent, Yb metal-trimethylbromosilane, has been explored for the reaction of aliph. ketones and imines. .alpha., .beta.-Unsatd. ketones are easily reduced with the reagent to give 1,6-diketones in good yields. Pinacol derivs. are also formed from aliph. ketones. In addn.,

aliph. aldimines and ketimines are converted to the corresponding diaminoethanes and amines, resp.

L27 ANSWER 13 OF 30 HCPLUS COPYRIGHT 1999 ACS  
 AN 1995:229662 HCPLUS  
 DN 122:80680  
 TI 1-(Trimethylsilyl)benzotriazole-Assisted Addition of Grignard Reagents to Imines: A Versatile Approach to Aliphatic Secondary Amines  
 AU Katritzky, Alan R.; Hong, Qingmei; Yang, Zhijun  
 CS Center for Heterocyclic Compounds, University of Florida, Gainesville, FL, 32611-7200, USA  
 SO J. Org. Chem. (1994), 59(26), 7947-8  
 CODEN: JOCEAH; ISSN: 0022-3263  
 DT Journal  
 LA English  
 OS CASREACT 122:80680  
 AB 1-(Trimethylsilyl)benzotriazole-assisted Grignard addn. to imines is described. Thus, equimolar amts of 1-(trimethylsilyl)benzotriazole and RCH:NCH<sub>2</sub>R<sub>1</sub> (R = Me<sub>2</sub>CH, Pr, 4-MeC<sub>6</sub>H<sub>4</sub>; R<sub>1</sub> = heptyl, PhCH<sub>2</sub>, Ph) were treated with R<sub>2</sub>MgX (R<sub>2</sub> = Ph, PhCH<sub>2</sub>, Me, Bu) to give 60-93% RCHR<sub>2</sub>NHCH<sub>2</sub>R<sub>1</sub>.

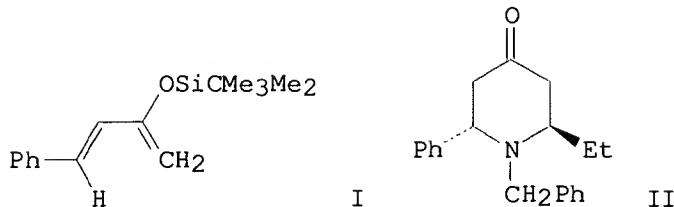
L27 ANSWER 14 OF 30 HCPLUS COPYRIGHT 1999 ACS  
 AN 1994:217817 HCPLUS  
 DN 120:217817  
 TI Highly Stereoselective Ene Reaction of Aldimines with 2-(Alkylthio)allyl Silyl Ethers  
 AU Tohyama, Yoshitomo; Tanino, Keiji; Kuwajima, Isao  
 CS Department of Chemistry, Tokyo Institute of Technology, Tokyo, 152, Japan  
 SO J. Org. Chem. (1994), 59(3), 518-19  
 CODEN: JOCEAH; ISSN: 0022-3263  
 DT Journal  
 LA English  
 OS CASREACT 120:217817  
 GI



AB A stereoselective ene reaction of aldimines with 2-(alkylthio)allyl silyl ethers was developed. Under the influence of Lewis acids, N-acylimine or geminal bis carbamates reacted with a (Z)-2-(methylthio)allyl silyl ether to afford syn adducts in >94% selectivity. E.g., BF<sub>3</sub>.OEt<sub>2</sub> catalyzed the reaction of (EtO<sub>2</sub>CNH)<sub>2</sub>CHPr and (Z)-MeCH:C(SMe)CH<sub>2</sub>OSiMe<sub>2</sub>CMe<sub>3</sub> to give an 89% yield of EtO<sub>2</sub>CNHCHPrCHMeC(SMe):CHOSiMe<sub>2</sub>CMe<sub>3</sub> (I, 94:6 syn:anti). Treating I with Et<sub>3</sub>SiH/CF<sub>3</sub>CO<sub>2</sub>H, followed by desulfurization with Raney Ni, gave pyrrolidine II.

L27 ANSWER 15 OF 30 HCPLUS COPYRIGHT 1999 ACS  
 AN 1994:106718 HCPLUS  
 DN 120:106718  
 TI [4+2]Type cycloaddition of aldimines bearing .alpha.-hydrogens with 2-siloxy-1,3-butadienes catalyzed by trimethylsilyl triflate  
 AU Akiba, Kinya; Motoshima, Toshihiro; Ishimaru, Kaori; Yabuta, Katunori; Hirota, Hiroshi; Yamamoto, Yohsuke  
 CS Fac. Sci., Hiroshima Univ., Higashi-Hiroshima, 724, Japan  
 SO Synlett (1993), (9), 657-9  
 CODEN: SYNLES; ISSN: 0936-5214

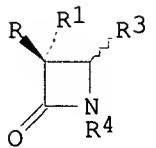
DT Journal  
 LA English  
 OS CASREACT 120:106718  
 GI



AB [4+2]Type cycloaddn. of unactivated imines bearing .alpha.-hydrogens with 2-siloxy-1,3-butadienes was performed efficiently by using trimethylsilyl triflate as catalyst. The relative stereochem. in the major diastereomers of the cycloadducts was assigned to be trans between C(2) and C(6) substituents. For example, the reaction of EtHC:NCH2Ph with (E)-2-[(tert-butyldimethylsilyl)oxy]-4-phenyl-1,3-butadiene (I) gave after cycloaddn. and desilylation trans-1-benzyl-2-ethyl-6-phenyl-4-piperidinone (II) as the major product.

L27 ANSWER 16 OF 30 HCAPLUS COPYRIGHT 1999 ACS  
 AN 1993:449018 HCAPLUS  
 DN 119:49018  
 TI Efficient catalysis of acidic montmorillonite on addition of silyl ketene acetal to imine  
 AU Onaka, Makoto; Ohno, Ryosuke; Yanagiya, Narutoshi; Izumi, Yusuke  
 CS Fac. Eng., Nagoya Univ., Nagoya, 464, Japan  
 SO Synlett (1993), (2), 141-2  
 CODEN: SYNLES; ISSN: 0936-5214  
 DT Journal  
 LA English  
 OS CASREACT 119:49018  
 AB Strongly acidic clay montmorillonite was found to be an excellent catalyst for addns. of silyl ketene acetals to imines. Comparison was also made of catalysis between the clay and trimethylsilyl triflate. Thus, stereoselective addn. of 80:20 or 32:68 E/Z MeCH:C(OSiMe3)OEt to PhCH:NPh catalyzed by Fe-exchanged montmorillonite afforded 97% PhCH(NHPh)CHMeCO2Et in 96:4 erythro:threo ratio.

L27 ANSWER 17 OF 30 HCAPLUS COPYRIGHT 1999 ACS  
 AN 1992:105918 HCAPLUS  
 DN 116:105918  
 TI Mild convenient one-pot synthesis of .beta.-lactams by condensation of titanium enolates of 2-pyridylthioesters with imines  
 AU Cinquini, Mauro; Cozzi, Franco; Cozzi, Pier Giorgio; Consolandi, Emanuela  
 CS Dip. Chim. Org. Ind., Univ. Milan, Milan, 20133, Italy  
 SO Tetrahedron (1991), 47(41), 8767-74  
 CODEN: TETRAB; ISSN: 0040-4020  
 DT Journal  
 LA English  
 OS CASREACT 116:105918  
 GI



I

AB Reaction of RR<sub>1</sub>CHCOR<sub>2</sub> (R = Me, Et, CHMe<sub>2</sub>, OCH<sub>2</sub>Ph; R<sub>1</sub> = H, Me; R<sub>2</sub> = 2-pyridyl) with Et<sub>3</sub>N in the presence of TiCl<sub>4</sub> affords titanium enolates that add to R<sub>3</sub>CH:NR<sub>4</sub> [R<sub>3</sub> = Ph, Pr, (E)-CH:CHPh; R<sub>4</sub> = CH<sub>2</sub>Ph, C<sub>6</sub>H<sub>4</sub>OMe-4] to give 52-99%  $\beta$ -lactams I with moderate to good stereoselectivity.

L27 ANSWER 18 OF 30 HCAPLUS COPYRIGHT 1999 ACS

AN 1991:655934 HCAPLUS

DN 115:255934

TI Alkylation of N-benzyl aldimines by butadiene in the presence of catalytic amounts of sodium

AU Kazaryan, A. Ts.; Geoletsyan, A. N.; Nonezyan, N. G.; Akopyan, S. K.; Martirosyan, G. T.

CS Nauchno-Proizvod. Ob'edin. "Nairit", Yerevan, USSR

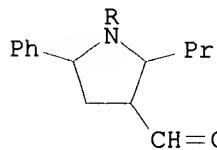
SO Arm. Khim. Zh. (1991), 44(2), 93-105

CODEN: AYKZAN; ISSN: 0515-9628

DT Journal

LA Russian

GI



I

AB The alkylation of N-butylidene- and N-isoamylidene benzyl amines and their prototropic isomers: N-benzylidene butylamine and N-benzylidene isoamylamine by butadiene in the presence of catalytic amounts of sodium gives mainly alkylvinylphenyl pyrrolidines I (R = H).

L27 ANSWER 19 OF 30 HCAPLUS COPYRIGHT 1999 ACS

AN 1990:611459 HCAPLUS

DN 113:211459

TI Oxidation of N-benzylidenealkylamines and N-alkylidenebenzylamines with oxygen in an alkaline aprotic medium

AU Grigoryan, G. S.; Tovmasyan, V. S.; Malkhasyan, A. Ts.; Martirosyan, G. T.; Beletskaya, I. P.

CS NPO "Nairit", Yerevan, USSR

SO Zh. Org. Khim. (1990), 26(4), 809-14

CODEN: ZORKAE; ISSN: 0514-7492

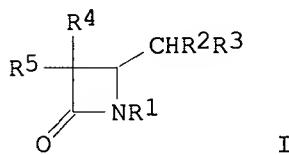
DT Journal

LA Russian

AB Oxidn. of N-EtCH<sub>2</sub>CH:NCH<sub>2</sub>Ph by oxygen in DMSO or THF catalyzed by KOH or KOCMe<sub>3</sub> in the presence of 18-crown-6 gave the isomeric starting imine and 30% of a mixt. contg. PrCH:CEtCH<sub>2</sub>N:CPh and BUCet:CHN:CHPh. The latter two are apparently formed via a concurrent condensation reaction. Conjugate oxidn.-redn. of Me<sub>2</sub>CHCH:NCH<sub>2</sub>Ph and Me<sub>2</sub>CHCH<sub>2</sub>N:CHPh in basic aprotic medium gave 60% Me<sub>2</sub>CHCH:NCH(OH)Ph.

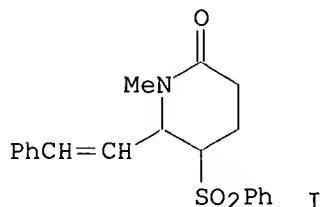
L27 ANSWER 20 OF 30 HCAPLUS COPYRIGHT 1999 ACS  
 AN 1989:496964 HCAPLUS  
 DN 111:96964  
 TI Preparation of 2-azetidinone derivatives as intermediates for  
 antibacterials  
 IN Akiba, Kinya; Wada, Makoto  
 PA Fujisawa Pharmaceutical Co., Ltd., Japan  
 SO Jpn. Kokai Tokkyo Koho, 7 pp.  
 CODEN: JKXXAF  
 DT Patent  
 LA Japanese  
 FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 64000066	A2	19890105	JP 1988-33283	19880216
PRAI JP 1987-38538		19870220		
OS MARPAT 111:96964				
GI				



AB The title compds. [I; R1 = H, aralkyl, protecting radical; R2, R4, R5 = H, alkyl; R3 = H, halo, org. group], useful as intermediates for antibacterials, are prep'd. via reaction of R1N:CHCHR2R3 with R4R5CHCO2R6 (R6 = ester residue). PrCH:NCH2CH2Ph reacted with a soln. of MeCHLiCO2Et (obtained from BuLi and EtCO2Et) in hexane contg. Me2AlCl at low temp. (not specified) overnight to give I (R1 = CH2CH2Ph, R2 = R5 = H, R3 = Et, R4 = Me).

L27 ANSWER 21 OF 30 HCAPLUS COPYRIGHT 1999 ACS  
 AN 1988:610866 HCAPLUS  
 DN 109:210866  
 TI Remote dianions. 3. Novel synthesis of substituted 2-piperidones from imines  
 AU Thompson, Charles M.; Green, Diana L. C.; Kubas, Robert  
 CS Dep. Chem., Loyola Univ. Chicago, Chicago, IL, 60626, USA  
 SO J. Org. Chem. (1988), 53(22), 5389-90  
 CODEN: JOCEAH; ISSN: 0022-3263  
 DT Journal  
 LA English  
 OS CASREACT 109:210866  
 GI



AB A general and versatile method that extends the synthetic utility of Lewis  
 KATHLEEN FULLER STIC LIBRARY 308-4290

acid promoted addns. to imines is described for the prepn. of 2-piperidone derivs. The addn. of the dianion of PhSO<sub>2</sub>(CH<sub>2</sub>)<sub>3</sub>CO<sub>2</sub>H to readily available imines is followed by cyclization in situ with the aid of (CF<sub>3</sub>CO)<sub>2</sub>O to the title heterocycles. These 5-phenylsulfonyl-6-alkyl(aryl)-2-piperidone derivs., e.g. I, may be reductively converted to the alkyl(aryl)piperidine or 2-piperidone derivs. in good yield.

L27 ANSWER 22 OF 30 HCAPLUS COPYRIGHT 1999 ACS

AN 1988:131365 HCAPLUS

DN 108:131365

TI A new synthesis of .beta.-lactams from lithium ester enolates and enolizable aldimines

AU Wada, Makoto; Aiura, Hideki; Akiba, Kinya

CS Fac. Sci., Hiroshima Univ., Hiroshima, 730, Japan

SO Tetrahedron Lett. (1987), 28(29), 3377-80

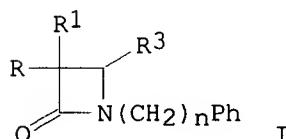
CODEN: TELEAY; ISSN: 0040-4039

DT Journal

LA English

OS CASREACT 108:131365

GI



AB RR<sub>1</sub>C:C(OLi)OR<sub>2</sub> (R = H, Me, CHMe<sub>2</sub>; R<sub>1</sub> = H, Me; R<sub>2</sub> = Me, Et) reacted with R<sub>3</sub>CH:N(CH<sub>2</sub>)<sub>n</sub>Ph (R<sub>3</sub> = Pr, CHMe<sub>2</sub>; n = 1, 2) in the presence of Me<sub>2</sub>AlCl to afford .beta.-lactams I in good yields.

L27 ANSWER 23 OF 30 HCAPLUS COPYRIGHT 1999 ACS

AN 1987:554186 HCAPLUS

DN 107:154186

TI Synthesis of pyrrolidine derivatives by improved aminoselenation via addition of the boron trifluoride complex of dihomallylcuprate to aldimines containing .alpha.-hydrogen

AU Wada, Makoto; Aiura, Hideki; Akiba, Kinya

CS Fac. Sci., Hiroshima Univ., Higashisenda-machi, 730, Japan

SO Heterocycles (1987), 26(4), 929-34

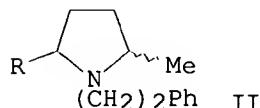
CODEN: HTCYAM; ISSN: 0385-5414

DT Journal

LA English

OS CASREACT 107:154186

GI



AB (CH<sub>2</sub>:CHCH<sub>2</sub>CH<sub>2</sub>)<sub>2</sub>CuMgBr.BF<sub>3</sub> reacted with aldimines, e.g., Ph(CH<sub>2</sub>)N:CHR (R = Pr, CHMe<sub>2</sub>), to afford the corresponding addn. products, e.g., Ph(CH<sub>2</sub>)<sub>2</sub>NHCHR(CH<sub>2</sub>)<sub>2</sub>CH:CH<sub>2</sub> (I) in good yields. I were converted to pyrrolidines II (R = Pr, CHMe<sub>2</sub>) by treatment with PhSeCl in the presence of CF<sub>3</sub>CO<sub>2</sub>H and silica gel.

L27 ANSWER 24 OF 30 HCAPLUS COPYRIGHT 1999 ACS

KATHLEEN FULLER STIC LIBRARY 308-4290

AN 1986:5592 HCPLUS  
 DN 104:5592  
 TI Addition of boron trifluoride complexes of alkylcopper, dialkylcuprate(I), and alkynyllithium to aldimines containing .alpha.-hydrogens  
 AU Wada, Makoto; Sakurai, Yoji; Akiba, Kinya  
 CS Fac. Sci., Hiroshima Univ., Hiroshima, 730, Japan  
 SO Nippon Kagaku Kaishi (1985), (3), 295-302  
 CODEN: NKAKB8; ISSN: 0369-4577  
 DT Journal  
 LA Japanese  
 OS CASREACT 104:5592  
 AB An efficient method for the nucleophilic addn. of organometallic reagents to imines is reported. RCu.cndot.BF3 (R = allenyl, phenethyl), generated in situ from Grignard reagents, CuI and BF3.cndot.OEt2, was added to aldimines without deprotonation of .alpha.-hydrogen to give 57-85% secondary amines. R2Cu.BF3 gave essentially the same results with wider application. Alkynyltrifluoroborates, prep'd. in situ from alkynyllithium and BF3.cndot.Et2O, were added to aldimines contg. .alpha.-H to give 57-.apprx.82% .alpha.-(1-alkynyl)amines.

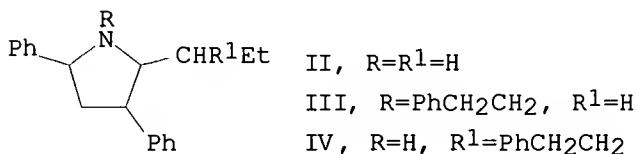
L27 ANSWER 25 OF 30 HCPLUS COPYRIGHT 1999 ACS  
 AN 1984:490486 HCPLUS  
 DN 101:90486  
 TI Addition of alkynyl anions to aldimines containing .alpha.-hydrogens: a novel synthesis of .beta.-aminoacetylenes  
 AU Wada, Makoto; Sakurai, Yoji; Akiba, Kinya  
 CS Fac. Sci., Hiroshima Univ., Hiroshima, 730, Japan  
 SO Tetrahedron Lett. (1984), 25(10), 1083-4  
 CODEN: TELEAY; ISSN: 0040-4039  
 DT Journal  
 LA English  
 AB Alkynylboranes (or alkynylborates), prep'd. in situ from C2H<sub>4</sub>Li; and BF3-Et2O, added to aldimines contg. .alpha.-H to afford .beta.-aminoacetylenes in 57-82% yields.

L27 ANSWER 26 OF 30 HCPLUS COPYRIGHT 1999 ACS  
 AN 1984:406715 HCPLUS  
 DN 101:6715  
 TI Addition of boron trifluoride complexes of organocopper reagents to aldimines containing .alpha.-hydrogens  
 AU Wada, Makoto; Sakurai, Yoji; Akiba, Kinya  
 CS Fac. Sci., Hiroshima Univ., Hiroshima, 730, Japan  
 SO Tetrahedron Lett. (1984), 25(10), 1079-82  
 CODEN: TELEAY; ISSN: 0040-4039  
 DT Journal  
 LA English  
 AB RCu-BF3 (R = Me, Bu, phenethyl), generated in situ from Grignard reagents, CuI, and BF3-Et2O, added to aldimines contg. .alpha.-H to afford secondary amines in 54-85% yields. BF3 complex of dialkylcuprate gave essentially the same result with wider application.

L27 ANSWER 27 OF 30 HCPLUS COPYRIGHT 1999 ACS  
 AN 1979:54135 HCPLUS  
 DN 90:54135  
 TI Orientation in base-promoted dehydrohalogenation of N-benzyl-N-chlorobutylamine  
 AU Bartsch, Richard A.; Cho, Bong Rae  
 CS Dep. Chem., Texas Tech Univ., Lubbock, Tex., USA  
 SO J. Org. Chem. (1979), 44(1), 145-6  
 CODEN: JOCEAH; ISSN: 0022-3263  
 DT Journal  
 LA English  
 AB The dehydrochlorination of PhCH<sub>2</sub>NClBu by NaOMe-MeOH, NaOEt-EtOH, KOCMe<sub>3</sub>-Me<sub>3</sub>COH and -hexane gave PhCH:NBu with no detectable PhCH<sub>2</sub>N:CHPr.

An E2 mechanism with considerable C-N double-bond development in the transition state was suggested. The KOCMe3-hexane system completed the reaction much faster than the other systems.

L27 ANSWER 28 OF 30 HCAPLUS COPYRIGHT 1999 ACS  
 AN 1978:74259 HCAPLUS  
 DN 88:74259  
 TI Alkylation of N-benzylaldimines with styrene  
 AU Kazaryan, A. Ts.; Misaryan, S. O.; Grigoryan, E. A.; Martirosyan, G. T.  
 CS Erevan. Med. Inst., Yerevan, USSR  
 SO Arm. Khim. Zh. (1977), 30(8), 674-9  
 CODEN: AYKZAN  
 DT Journal  
 LA Russian  
 GI



AB N-alkyliidenebenzylamines PhCH<sub>2</sub>N:CHCH<sub>2</sub>R [R = H, Me, Et (I), iso-Pr] underwent [3 + 2] cycloaddn. with styrene to give pyrrolidines. Products resulting from C- and N-alkylation were also formed. E.g., a 1:1 mixt. of I and styrene gave 62% II, 16% a mixt. of III and IV, and 8% H<sub>2</sub>NCH<sub>2</sub>CHEtCH<sub>2</sub>CH<sub>2</sub>Ph.

L27 ANSWER 29 OF 30 HCAPLUS COPYRIGHT 1999 ACS  
 AN 1977:457539 HCAPLUS  
 DN 87:57539  
 TI Gas chromatographic analysis of lower aliphatic carbonyl compounds using the imine formation reaction  
 AU Hoshika, Yasuyuki; Kozima, Ichiro; Koike, Kazumi; Yoshimoto, Kenji  
 CS Aichi Environ. Res. Cent., Nagoya, Japan  
 SO Aichi-ken Kogai Chosa Senta Shoho (1976), 4, 108-13  
 CODEN: AKCSD3  
 DT Journal  
 LA Japanese  
 AB Carbonyl compds. were identified in cigarette smoke and automotive exhaust by gas chromatog. using the imine formation reaction (reaction of carbonyl compds. with PhCH<sub>2</sub>NH<sub>2</sub>). Acetaldehyde [75-07-0], propionaldehyde [123-38-6], and isobutyraldehyde [78-84-2], Me Et ketone [78-93-3], and Me isopropyl ketone [563-80-4] were detected in cigarette smoke at concns. 0.2-1.3 and 0.5-1.3 mg/cigarette for aldehydes and ketones, resp. AcH, EtCHO, butyraldehyde [123-72-8], crotonaldehyde [4170-30-3], valeraldehyde [110-62-3], and n-capronaldehyde [66-25-1] were identified in exhaust gases. The sensitivity of the imines is .apprx.10 times higher than that of free carbonyl compds.

L27 ANSWER 30 OF 30 HCAPLUS COPYRIGHT 1999 ACS  
 AN 1975:458922 HCAPLUS  
 DN 83:58922  
 TI New route to aminonitriles via cyanosilylation of Schiff bases and oximes  
 AU Ojima, Iwao; Inaba, Shinichi; Nakatsugawa, Kimiyo; Nagai, Yoichiro  
 CS Sagami Chem. Res. Cent., Sagamihara, Japan  
 SO Chem. Lett. (1975), (4), 331-4  
 CODEN: CMLTAG  
 DT Journal  
 LA English

AB Me<sub>3</sub>SiCN reacts with Schiff bases RR<sub>1</sub>C:NR<sub>2</sub> (R, R<sub>1</sub>, R<sub>2</sub> = e.g. H, Ph) and oximes R<sub>2</sub>R<sub>3</sub>C:NOH (R<sub>2</sub>, R<sub>3</sub> = e.g. Me) in the presence of a catalytic amount of a Lewis acid to give RR<sub>1</sub>C(CN)NHOSiMe<sub>3</sub>, and R<sub>2</sub>R<sub>3</sub>C(CN)NHOSiMe<sub>3</sub>, which were easily hydrolyzed to RR<sub>1</sub>C(CN)NHR<sub>3</sub> and R<sub>2</sub>R<sub>3</sub>C(CN)NHOH.

=> D L24 ALL 1

L24 ANSWER 1 OF 11 HCAPLUS COPYRIGHT 1999 ACS  
AN 1999:795496 HCAPLUS

*applicant*

TI Reaction product derived from amine-functionalized elastomers and maleated polyolefins

IN Krom, James A.; Wang, Xiaorong

PA Bridgestone Corporation, Japan

SO Eur. Pat. Appl., 9 pp.

CODEN: EPXXDW

DT Patent

LA English

IC ICM C08G081-02

CC 35 (Chemistry of Synthetic High Polymers)

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
------------	------	------	-----------------	------

PI EP 964022 A1 19991215 EP 1999-111030 19990611

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,  
IE, SI, LT, LV, FI, RO

PRAI US 1998-97035 19980612

AB Unavailable

*new reference -  
indexing including  
RN's not in file  
yet*

FAY, SHARPE, FAGAN, MINNICH & McKEE, LLP.  
1100 SUPERIOR AVENUE, SUITE 700  
CLEVELAND, OHIO 44114 2518  
TELEPHONE: (216) 861-5582  
FACSIMILE: (216) 241-1666

DATE: November 15, 1999 (12:41pm)

FILE REF: FIR 2 0007

RE: PATENT SEARCH  
SMC/kls

---

File 351:DERWENT WPI 1963-1999/UD=, UM=, & UP=199946

(c) 1999 Derwent Info Ltd

\*File 351: New abstract and indexing content available. For details  
see HELP NEWS 351.

Set	Items	Description
Ref	Items	Index-term
E1	1	PN=DE 3140561
E2	1	PN=DE 3140564
E3	1	*PN=DE 3140565
E4	1	PN=DE 3140566
E5	1	PN=DE 3140568
E6	1	PN=DE 3140570
E7	1	PN=DE 3140571
E8	1	PN=DE 3140573
E9	1	PN=DE 3140574
E10	1	PN=DE 3140575
E11	1	PN=DE 3140576
E12	1	PN=DE 3140577

S1 1 PN="DE 3140565"

1/3/1

DIALOG(R) File 351:DERWENT WPI

(c) 1999 Derwent Info Ltd. All rts. reserv.

003679502

WPI Acc No: 83-39473K/198317

XRAM Acc No: C83-038523

Impact resistant thermoplastic moulding compsn. - contg. polyvinyl  
aromatic-anhydride co-polymer and rubber with reactive unsatd. monomer

Patent Assignee: BASF AG (BADI )

Inventor: BRANDSTETT F; ECHTE A; HAMBRECHT J; MCKEE G E

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Main IPC	Week
DE 3140565	A	19830421					198317 B

Priority Applications (No Type Date): DE 3140565 A 19811013  
Language, Pages: DE 3140565 (18)

1/AB/1

DIALOG(R) File 351:(c) 1999 Derwent Info Ltd. All rts. reserv.

Abstract (Basic): DE 3140565 A

A thermoplastic moulding compsn. contains (A) 50-90wt.% of a copolymer of (a) 65-95wt.% of a monovinyl aromatic cpd., (a') 5-35% of an unsatd. dicarboxylic acid anhydride, and (a'') up to 20% of an acrylic acid ester or acrylonitrile, and (B) 10-50wt.% of a rubber, with glass temp. (Tg) not above 0 deg.C, consisting of (b') a 4-5C conjugated diene, a 1-8C alkyl acrylate, and up to 12C monovinyl aromatic cpd., acrylonitrile or a vinyl ether, and/or ethylene, propylene and a non-conjugated diene, and (b'') 0.5-5wt.% of an ethylenically unsatd. monomer with at least 1 terminal OH, SH or NHR gp., where R is H, 1-8C alkyl, aralkyl or aryl.

The compsns. are impact resistant, and have high heat distortion temp. and better mechanical properties.

S2 1 PN=EP 298370

2/3/1

DIALOG(R) File 351:DERWENT WPI  
(c) 1999 Derwent Info Ltd. All rts. reserv.

007744355

WPI Acc No: 89-009467/198902

XRAM Acc No: C89-004378

High impact thermoplastic compsn. giving high gloss moulding - prep'd. from vinyl-aromatic monomer, amine-terminated elastomer and maleic anhydride copolymer

Patent Assignee: BASF AG (BADI )

Inventor: BRONSTERT K; BUESCHL R; ECHTE A; SCHWABEN H; SCHWABEN H D

Number of Countries: 006 Number of Patents: 004

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Main IPC	Week
EP 298370	A	19890111	EP 88110462	A	19880630		198902 B
DE 3722500	A	19890119	DE 3722500	A	19870708		198904
EP 298370	B1	19921202	EP 88110462	A	19880630	C08F-279/02	199249
DE 3876317	G	19930114	DE 3876317	A	19880630	C08F-279/02	199303
			EP 88110462	A	19880630		

Priority Applications (No Type Date): DE 3722500 A 19870708

Filing Details:

Patent	Kind	Filing Notes	Application	Patent
EP 298370	A			

Designated States (Regional): BE DE FR GB IT NL  
EP 298370 B1  
Designated States (Regional): BE DE FR GB IT NL  
DE 3876317 G Based on EP 298370  
Language, Pages: EP 298370 (G, 6); EP 298370 (G, 6)

2/AB/1

DIALOG(R) File 351: (c) 1999 Derwent Info Ltd. All rts. reserv.

Abstract (Basic): EP 298370 A

High impact thermoplastic moulding compsn. is produced by polymerising a mixt. of 80-96 (wt.)% 8-10C mono-vinyl-aromatic monomer(s) (I), 3-20% elastomer(s) (II) contg. butadiene and/or styrene and 0.5-10% other components. The novelty is that the polymer chain of the (II) component is terminated with prim. amino gps. and the (III) component is a copolymer contg. 8-10C vinyl-aromatic monomer(s) and maleic anhydride.

Reaction is carried out in the presence of additives, e.g. regulators, lubricants, stabilisers etc. Component (I) may also contain 15-40 % alpha, beta-unsatd. nitrile. Component (III) consists of 85-99.5% vinyl-aromatic monomer and 0.5-15% maleic anhydride units and opt. 15-40 % alpha, beta-unsatd. nitrile units.

USE/ADVANTAGE - The compsn. is claimed for use in the prodn. of mouldings. It is suitable for extrusion, injection moulding, calendering, blow moulding, pressing and sintering, esp. injection moulding of automobile components. High impact polystyrene or ABS can be produced using special elastomers, which can be mfd. reproducibly and economically and have low soln. viscosity. The rubber particles can be made finer, which increases the gloss.

0/0

Abstract (Equivalent): EP 298370 B

High impact thermoplastic moulding compsn. is produced by polymerising a mixt. of 80-96 (wt.)% 8-10C mono-vinyl-aromatic monomer(s) (I), 3-20% elastomer(s) (II) contg. butadiene and/or styrene and 0.5-10% other components. The novelty is that the polymer chain of the (II) component is terminated with prim. amino gps. and the (III) component is a copolymer contg. 8-10C vinyl-aromatic monomer(s) and maleic anhydride.

Reaction is carried out in the presence of additives, e.g. regulators, lubricants, stabilisers etc. Component (I) may also contain 15-40 % alpha, beta-unsatd. nitrile. Component (III) consists of 85-99.5% vinyl-aromatic monomer and 0.5-15% maleic anhydride units and opt. 15-40 % alpha, beta-unsatd. nitrile units.

USE/ADVANTAGE - The compsn. is claimed for use in the prodn. of mouldings. It is suitable for extrusion, injection moulding, calendering, blow moulding, pressing and sintering, esp. injection moulding of automobile components. High impact polystyrene or ABS can be produced using special elastomers, which can be mfd. reproducibly and economically and have low soln. viscosity. The rubber particles can be made finer, which increases the gloss. (6pp Dwg.No.0/0)

Temp SearchSave "TD112" stored